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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|----------------------|------------------|
| 10:058,290 | 01/30/2002 | Wataru Okase | P 290584 FEL0114-USA | 2635 |

909 7590 07/09/2003
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EXAMINER

BERRY, RENEE R

ART UNIT PAPER NUMBER

2818

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/058,290

Applicant(s)

Okase

Examiner

Renee Berry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above, claim(s) 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of Group I in Paper No. 6 is acknowledged.
2. Claim 7 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 7.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent no. 5,200,048 to Tanaka et al. in view of US patent no. 4,818,349 to Smith.

In regard to claim 1, Tanaka teaches a plating apparatus having a plating solution bath which can hold a plating solution and is provided with a first electrode held in a state soaked in the held plating solution; a workpiece holding mechanism which can hold a workpiece to contact its processing surface to the plating solution; and a contact member, disposed in the workpiece

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holding mechanism, that can electrically contact with the circumferential edge of the workpiece so to form a conductive layer on the workpiece, which is in contact with the plating solution at column 8, lines 13-34.

However, Tanaka does not teach the limitations of claims 2-6 nor of claim 1 - the contact member is divided along the circumferential direction of the workpiece to be electrically contacted.

In regard to claim 2, Smith teaches the plating apparatus having electric current control sections which are connected to the respective divided sections of the contact member to control a plating electric current passing through the respective sections of the contact member at column 3, lines 39-61.

In regard to claim 3, Smith teaches a plating apparatus having the electric current control sections provided with an electric current detecting section that detects a plating electric current passing through the respective sections of the contact member and a controlled current source that adjust the plating electric current in such a way that a value of the detected electric current becomes substantially equal to a reference value at column 6, lines 4-12.

In regard to claims 4 and 5, Smith teaches a plating apparatus having a reference value setting section, connected to the electric current control sections in order to give a reference value to the electric current control sections, that sets the reference value at column 6, lines 35-44.

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In regard to claims 1 and 6, Smith teaches a plating apparatus having a contact member is divided into six or more sections along the circumferential direction of the workpiece to be electrically contacted at column 6, lines 60-66.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tanaka to include the plating apparatus having electric current control sections which are connected to the respective divided sections of the contact member to control a plating electric current passing through the respective sections of the contact member, a plating apparatus having the electric current control sections provided with an electric current detecting section that detects a plating electric current passing through the respective sections of the contact member and a controlled current source that adjust the plating electric current in such a way that a value of the detected electric current becomes substantially equal to a reference value, a plating apparatus having a contact member is divided into six or more sections along the circumferential direction of the workpiece to be electrically contacted, a plating apparatus having a contact member is divided into six or more sections along the circumferential direction of the workpiece to be electrically contacted, since such a modification would result in a maskless system for selectively plating a zone of a continuously moving workpiece or strip of material at column 2, lines 21-24 of Smith.

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Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. R. Berry whose telephone number is (703) 305-4544.


HOAI HO
PRIMARY EXAMINER


RRB

June 30, 2003